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Hardee

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(54) **VOLTAGE DOWN CONVERTER WITH SWITCHED HYSTERESIS**

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(52) U.S. Cl. **327/206; 327/536; 327/540**

(58) Field of Search **323/282, 283; 327/60, 72, 73, 77, 205, 206, 534, 535, 536, 537, 538, 540, 541, 543, 545, 546**

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(57) **ABSTRACT**

A voltage down converter with hysteresis generator combining a hysteresis signal to a reference voltage and an output voltage feedback signal applied to a comparator. The hysteresis generator is coupled to a control signal giving advance notice of when a high current load is to be activated. The hysteresis signal is switched to a first state prior to the high current load activation, and switched to a second state after the high current load activation. In the first state, the hysteresis voltage is added to a reference voltage. In the second state, the hysteresis voltage is added to the voltage output feedback signal.

8 Claims, 4 Drawing Sheets

